

SEQUENCE LISTING

<110> ZHONG, PINGYU LUO, PEIZHI WANG, KEVIN C. HSIEH, MARK LI, YAN

- <120> HUMANIZED ANTIBODIES AGAINST VASCULAR ENDOTHELIAL GROWTH FACTOR
- <130> AX0001ID
- <140> 10/723,434
- <141> 2003-11-26
- <150> 10/443,134
- <151> 2003-05-20
- <150> 10/153,159
- <151> 2002-05-20
- <150> 10/153,176
- <151> 2002-05-20
- <150> 10/125,687
- <151> 2002-04-17
- <150> 60/284,407
- <151> 2001-04-17
- <160> 443
- <170> PatentIn version 3.5
- <210> 1
- <211> 107
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 1
- Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
- Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30
- Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile 35 40 45
- Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 2

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 3

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 3

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 4

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 4

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 5

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 5

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly 1 5 10 15

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 6

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 6

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly 1 5 10 15

Glu Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 7

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 7

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1 10 15

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Ser Leu Leu Val 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 8

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 8

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 9

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 9

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp \$85\$ 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 10

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 10

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

```
<210> 11
```

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 11

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 12

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 12

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Leu Gly
1 10 15

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 13

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 13

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 14

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 14

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ala Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 15

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 15

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Ser Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Lys Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 16

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 16

Glu Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 17

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 17

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 18

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 18

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 19

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 19

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 20

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 20

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile 35 40 45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Gly Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 21

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 21

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 22

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 22

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 23

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 23

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Ala Ile Lys 100 105

<210> 24

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 24

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 25

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 25

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 26

<211> 107

<212> PRT

<213> Artificial Sequence

<220S

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 26

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 27

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 27

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 28

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 28

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 100 105

<210> 29

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 29

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Leu Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 30

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 30

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Ala Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 31

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 31

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 32

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 32

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 33

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 33

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 34

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 34

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 35

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 35

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 36

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 36

Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 10 15

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Gln Ala Ile Arg Asn Asp 20 25 30

Leu Thr Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Gly Ala Thr Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Thr Thr Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 37

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 37

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Thr Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 38

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 38

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Arg Val Ala Ile Thr Cys Arg Ala Ser Arg Asp Ile Thr Thr Asp $20 \hspace{1cm} 25 \hspace{1cm} 30$

Leu Ala Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

- <210> 39
- <211> 107
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 39
- Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 10 15
- Asp Arg Ile Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asp Asp 20 25 30
- Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60
- Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80
- Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95
- Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105
- <210> 40
- <211> 107
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 40
- Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 10 15
- Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30
- Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 41

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 41

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ala Ile Tyr Asp Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 42

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 42

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Lys Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Ile Ala Pro Lys Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Cys Gln Gln Ser Tyr Ser Pro Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys 100 105

<210> 43

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 43

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr 20 . 25 30

Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 44

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 44

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Thr Gly Ser Gly Thr Asp Phe Ala Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Ser Ala Ser Tyr Tyr Cys Gln Gln Ser Tyr Thr Ile Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 45

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 45

Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Thr Ile Thr Ile Ser Cys Arg Ser Ser Gln Pro Ile Thr Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Ala Ala Ser Arg Leu Gln Gly Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp

85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 46

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 46

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn 20 25 30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu 35 40 45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Leu Ser 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Leu 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu 85 90 95

Thr Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 47

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 47

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 $$ 5 $$ 10 $$ 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Tyr Ser Asn Ile Gly Ser Asn 20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Val Leu 35 40 45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 48

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 48

Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

<210> 49

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 49

Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Ser Val Thr Ile Ser Cys Ser Gly Thr Thr Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Arg Ser Ala Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95 Ser Gly Tyr Val Phe Gly Ala Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 50

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 50

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn 20 25 30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 51

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 51

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Val Gly Arg Asn 20 25 30

Thr Val Asn Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Phe Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Met Tyr Gly Asn Asp Glu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 50 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 52

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 52

Gln Pro Val Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser 50 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

```
<210> 53
```

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 53

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Asn Ser Asn Ile Gly Ser Asn 20 25 30

Asn Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Ile Tyr Gly Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Gly Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 54

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 54

Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
1 10 15

Arg Val Thr Ile Ser Cys Thr Gly Arg Ser Ser Asn Ile Gly Ala Gly 20 25 30

His Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu 35 40 45

Leu Ile Tyr Ala Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe 50 55 60

Ser Asp Ser Lys Ser Gly Thr Ser Ala Ser Leu Gly Ile Ser Gly Leu 65 70 75 80

Arg Ser Glu Asp Glu Ala Asp Tyr Phe Cys Ala Thr Trp Asp Asp Ser 85 90 95

<210> 55

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

```
<210> 56
```

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 56

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 57

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 57

Glu Gly Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 58

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Ala Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 59

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 59

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 60

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Arg Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 61

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 61

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 62

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 62

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ala Leu Asp His Phe 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

- <210> 63
- <211> 123
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 63
- Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15
- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Tyr Asn Tyr 20 25 30
- Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45
- Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe 50 60
- Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80
- Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95
- Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110
- Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120
- <210> 64
- <211> 123
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 64
- Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
 1 5 10 15
- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Leu Asp His Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 65

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 65

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 66

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 66

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 67

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 68

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 68

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asn Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 69

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 69

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 70

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 70

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 71

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 71

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 72

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 72

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 73

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 73

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 74

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 75

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 75

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 76

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 76

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 77

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 77

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \\ 40 \\ 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Lys Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 78

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 78

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Ala Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Leu Thr Phe Ser Leu Asp Asn Ser Lys Asn Pro Pro Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 79

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 79

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 80

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 80

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 81

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 82

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 82

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 83

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 83

Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 84

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 84

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 85

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 85

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly Ser
1 5 10 15

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr His Tyr Gly 20 25 30

Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val Gly 35 40 45

Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Glu Phe Lys 50 55 60

Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu 65 70 75 80

Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val Trp 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 86

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 86

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Thr His Tyr 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 87

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 87

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 88

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr 20 25 30

Gly Val Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 89

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 89

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala Ser Phe 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 90

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 90

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asp His Phe 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

```
<210> 91
```

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 91

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asn Asn Tyr 20 25 30

Gly Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 92

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 92

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe 20 \cdot 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val\$35\$ 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 93

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 93

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe 20 25 30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 94

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 94

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser Asn Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 95

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 96

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 96

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr His Tyr 20 25 30

Gly Val Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Gln Glu Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 97

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 97

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr Ser Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Glu Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

```
<210> 98
```

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 98

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Phe Asp His Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 99

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 99

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 100

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 100

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys $85 \hspace{1cm} 90 \hspace{1cm} 95$

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 101

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 101

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 102

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 103

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 103

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 104

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 104

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

- <210> 105
- <211> 123
- <212> PRT
- <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 105

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 106

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 106

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 107

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 107

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Leu Ser His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Asp Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 108

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 108

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe 20 25 30

Gly Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Trp Ile Asn Thr Tyr Asn Gly Glu Thr Thr Tyr Ala Pro Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 109

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 109

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe 20 25 30

Gly Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 110

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 110

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe 50 55 60

```
Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65
                    70
Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                                         95
Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
                                 105
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                            120
        115
<210> 111
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 111
Gly Phe Asp Phe Thr Asn Tyr Gly Met Asn
              5
<210> 112
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
<210> 113
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 113
Gly Tyr Ser Leu Asp His Tyr Gly Met Asn
                5
```

```
<210> 114
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 114
Gly Tyr Ala Leu Asp His Phe Gly Leu Asn
<210> 115
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 115
Gly Tyr Asp Phe Tyr Asn Tyr Gly Ile Asn
<210> 116
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 116
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
                5
<210> 117
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Gly Tyr Ser Phe Asp His Tyr Gly Leu Asn
                5
<210> 118
<211> 10
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 118
Gly Tyr Asp Phe Ser Asn Tyr Gly Leu Asn
                5
<210> 119
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 119
Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
<210> 120
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 120
Gly Tyr Asp Phe Ala His Tyr Gly Val Asn
                5
<210> 121
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 121
Gly Tyr Asp Phe Asp His Phe Gly Ile Asn
                5
1
<210> 122
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 122
Gly Tyr Asp Phe Asn Asn Tyr Gly Met Asn
                5
                                     10
```

```
<210> 123
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 123
Gly Tyr Asp Phe Ala Ser Phe Gly Ile Asn
<210> 124
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 124
Gly Phe Asn Phe Thr His Tyr Gly Ile Asn
                5
<210> 125
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 125
Gly Tyr Asp Phe Ala His Tyr Gly Leu Asn
                5
1
<210> 126
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 126
Gly Tyr Asn Phe Tyr His Tyr Gly Val Asn
                5
<210> 127
<211> 10
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 127
Gly Tyr Asp Phe Thr His Tyr Gly Leu Asn
<210> 128
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 128
Gly Tyr Asn Phe Tyr Ser Tyr Gly Leu Asn
<210> 129
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 129
Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
                 5
<210> 130
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 130
Gly Tyr Thr Phe Thr His Tyr Gly Leu Asn
<210> 131
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 131
Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
<210> 132
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 132
Gly Tyr Asp Leu Ser His Tyr Gly Leu Asn
<210> 133
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 133
Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
                5
<210> 134
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
<210> 135
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 135
Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
```

```
<210> 136
 <211> 17
 <212> PRT
<213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Synthetic peptide
 <400> 136
 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe Thr
                                      10
 Arg
 <210> 137
 <211> 17
 <212> PRT
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: Synthetic peptide
 <400> 137
 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe Thr
                                      10
 Arg
 <210> 138
 <211> 17
 <212> PRT
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: Synthetic peptide
 <400> 138
 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe Thr
                 5
 Arg
 <210> 139
 <211> 17
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 139
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe Thr
Arg
<210> 140
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 140
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe Lys
                                    10
Arg
<210> 141
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 141
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Tyr Ala His Asp Phe Lys
Arg
<210> 142
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 142
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe Lys
```

Arg

```
<210> 143
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 143
Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe Lys
                                     10
Arg
<210> 144
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 144
Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe Lys
                 5
Arg
<210> 145
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 145
Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe Lys
                                     10
Arg
<210> 146
<211> 17
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe Lys
Arg
<210> 147
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 147
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Gln Glu Phe Lys
Arg
<210> 148
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 148
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe Thr
1
                                     10
Arg
<210> 149
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Glu Phe Lys
                5
                                    10
```

Arg

Arg

```
<210> 150
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 150
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe Lys
                                    10
Arg
<210> 151
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Glu Phe Lys
Arg
<210> 152
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 152
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Asp Phe Lys
                                    10
```

```
<210> 153
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 153
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Asp Phe Thr
                                     10
Arg
<210> 154
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 154
Trp Ile Asn Thr Tyr Asn Gly Glu Thr Thr Tyr Ala Pro Asp Phe Lys
                                     10
Arg
<210> 155
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 155
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Glu Phe Lys
                5
1
                                     10
Arg
<210> 156
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 156
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe Lys
Arg
<210> 157
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                5
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser
<210> 158
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 158
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 159
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 159
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                    10
```

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 160

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 160

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Val Ser 20 25

<210> 161

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 161

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 $$ 5 $$ 10 $$ 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 162

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 162

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

```
<210> 163
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
                                     10
Thr Leu Arg Leu Thr Cys Ala Ala Ser
            20
<210> 164
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 164
Asn Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
<210> 165
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 165
Lys Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
1
                5
                                     10
<210> 166
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 166
His Ala Ser Gln Ser Ile Ser Ser Tyr Leu Ala
```

```
<210> 167
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ser Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 168
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 168
Arg Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 169
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 169
Lys Ala Ser Gln Ser Ile Gly Ser Tyr Leu Ala
1
                5
                                     10
<210> 170
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
His Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 171
<211> 11
<212> PRT
<213> Artificial Sequence
```

```
<223> Description of Artificial Sequence: Synthetic peptide
<400> 171
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Ala
                5
<210> 172
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 172
Asn Ala Ser Gln Ser Ile Gly Ser Tyr Leu Ala
<210> 173
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 173
Ser Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
<210> 174
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 174
Lys Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
                                    10
<210> 175
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Asn Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
```

```
<210> 176
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 176
His Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
<210> 177
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 177
Gln Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
<210> 178
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 178
Arg Ala Ser Gln Ser Ile Ser Thr Tyr Ile Asn
1
                5
<210> 179
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Arg Ala Ser Arg Asp Ile Arg Asn Asp Leu Ala
<210> 180
<211> 11
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Arg Ala Ser Arg Asp Ile Thr Thr Asp Leu Ala
<210> 181
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 181
Arg Ala Ser Gln Asp Ile Arg Lys Asp Leu Ala
<210> 182
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 182
Arg Ala Ser Gln Ala Ile Arg Asn Asp Leu Thr
                5
<210> 183
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Arg Ala Ser Gln Ala Ile Tyr Asp Tyr Leu Ala
                5
<210> 184
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
```

```
Arg Ser Ser Gln Pro Ile Thr Asn Asp Leu Ala
<210> 185
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 185
Arg Ala Ser Arg Asp Ile Arg Asp Asp Leu Ala
<210> 186
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 186
Ser Gly Ser Ser Ser Asn Val Gly Arg Asn Thr Val Asn
                5
<210> 187
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 187
Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn Pro Val Asn
<210> 188
<211> 14
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 188
Thr Gly Arg Ser Ser Asn Ile Gly Ala Gly His Asp Val His
```

```
<210> 189
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 189
Ser Gly Ser Asn Ser Asn Ile Gly Ser Asn Asn Val Tyr
                5
<210> 190
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 190
Ser Gly Ser Tyr Ser Asn Ile Gly Ser Asn Ala Val Asn
<210> 191
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 191
Ser Gly Thr Thr Ser Asn Ile Gly Ser Asn Ser Val Asn
                5
1
<210> 192
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Ser Val Thr
<210> 193
<211> 13
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 193
Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn Ser Val Thr
<210> 194
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 194
Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Pro Val Asn
<210> 195
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 195
Gly Ala Ser Asn Leu Ala Ser
                5
<210> 196
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 196
Asp Ala Ser Asn Leu Ala Ser
                5
<210> 197
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 197
Ser Ala Ser Asn Leu Ala Ser
                5
```

```
<210> 198
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 198
Ala Ala Ser Ser Leu Gln Ser
                5
<210> 199
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 199
Ala Ala Ser Arg Leu Gln Ser
<210> 200
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 200
Ala Ala Ser Thr Leu Gln Ser
                5
<210> 201
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 201
Gly Ala Thr Thr Leu Gln Ser
<210> 202
<211> 7
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ala Ala Ser Arg Leu Gln Gly
<210> 203
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 203
Gly Asn Asp Glu Arg Pro Ser
<210> 204
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 204
Ala Ala Ser Asn Leu Ala Ser
                5
<210> 205
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 205
Ala Asn Asp Gln Arg Pro Ser
                5
<210> 206
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 206
Gly Asn Asn Gln Arg Pro Ser
<210> 207
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 207
Thr Asn Asn Gln Arg Pro Ser
<210> 208
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 208
Gly Asn Asp Gln Arg Pro Ser
               5
<210> 209
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 209
Ser Asn Asn Gln Arg Pro Ser
1
<210> 210
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 210
Gln Gln Tyr Asn Ser Lys Pro Trp Thr
                5
```

```
<210> 211
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 211
Gln Gln Tyr Ser Ser Thr Pro Tyr Thr
                5
<210> 212
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 212
Gln Gln Tyr Asn Ser Thr Pro Trp Thr
<210> 213
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 213
Gln Gln Tyr Tyr Ser Thr Pro Trp Thr
                5
1
<210> 214
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 214
Gln Gln Tyr Asn Ser Ala Pro Trp Thr
                5
1
<210> 215
<211> 9
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 215
Gln Gln Tyr Ser Ser Ser Pro Trp Thr
                5
<210> 216
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 216
Gln Gln Tyr Tyr Ser Gly Pro Trp Thr
<210> 217
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 217
Gln Gln Tyr Ser Ser Thr Pro Trp Thr
<210> 218
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 218
Gln Gln Tyr Tyr Ser Ala Pro Trp Thr
                5
<210> 219
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Gln Gln Ser Tyr Ser Thr Pro Trp Thr
```

```
<210> 220
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 220
Gln Gln Ser Tyr Ser Pro Pro Trp Thr
<210> 221
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 221
Gln Gln Ser Tyr Thr Ile Pro Trp Thr
<210> 222
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 222
Gln Gln Ser Ser Thr Thr Pro Trp Thr
                5
<210> 223
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Ala Thr Trp Asp Asp Ser Leu Asn Gly Tyr Val
                5
<210> 224
<211> 11
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ala Ser Trp Asp Asp Ser Leu Thr Gly Tyr Val
<210> 225
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 225
Ala Thr Trp Asp Asp Ser Leu His Gly Tyr Val
<210> 226
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 226
Gly Ala Trp Asp Asp Ser Leu Asn Gly Tyr Val
                5
                                     10
<210> 227
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ala Ala Trp Asp Asp Ser Leu Asn Gly Tyr Val
                5
                                     10
<210> 228
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 228
Ala Ala Trp Asp Asp Ser Leu Ser Gly Tyr Val
                5
<210> 229
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 229
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 230
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 230
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
                5
                                    10
                                                         15
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 231
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Thr Cys
            20
```

```
<210> 232
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 233
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 233
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 234
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 234
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                5
                                                         15
1
                                     10
Glu Arg Ala Thr Ile Ser Cys
<210> 235
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 235
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 236
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 236
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 237
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 238
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 238
Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
                                    10
```

Glu Arg Ala Thr Ile Ser Cys 20

<210> 239

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 239

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Glu Arg Ala Thr Ile Thr Cys 20

<210> 240

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 240

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys
20

<210> 241

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 241

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys 20

```
<210> 242
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 243
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 243
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 244
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 244
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                5
                                     10
1
                                                         15
Glu Arg Ala Thr Ile Thr Cys
<210> 245
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 245
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 246
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 246
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                5
                                    10
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 247
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                    10
1
                5
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 248
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 248
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                    10
```

Glu Arg Ala Thr Ile Thr Cys
20

<210> 249

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 249

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys 20

<210> 250

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 250

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys 20

<210> 251

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 251

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Thr Val Thr Ile Thr Cys 20

```
<210> 252
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
                                    10
Asp Arg Val Ala Ile Thr Cys
            20
<210> 253
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 253
Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys
            20
<210> 254
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 254
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                                         15
                5
                                    10
Asp Arg Val Thr Ile Thr Cys
<210> 255
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 255
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
                5
Asp Thr Val Thr Ile Ala Cys
<210> 256
<211> 23
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
                                    10
Asp Thr Val Thr Ile Ala Cys
            20
<210> 257
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
Asp Arg Val Thr Ile Thr Cys
            20
<210> 258
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 258
Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
```

Asp Thr Ile Thr Ile Ser Cys 20

<210> 259

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 250

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Arg Ile Thr Ile Thr Cys 20

<210> 260

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 260

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ala Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys 20

<210> 261

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 261

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys

```
<210> 262
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 262
Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                5
                                     10
Arg Val Thr Ile Ser Cys
            20
<210> 263
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 263
Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
Arg Val Thr Ile Ser Cys
            20
<210> 264
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 264
Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                                                         15
1
                5
                                     10
Arg Val Thr Ile Ser Cys
            20
<210> 265
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 265
Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
Arg Val Thr Ile Ser Cys
<210> 266
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                                    10
Ser Val Thr Ile Ser Cys
            20
<210> 267
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 267
Gln Pro Val Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
                                    10
Arg Val Thr Ile Ser Cys
            20
<210> 268
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 268
Asn Phe Met Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
                                    10
```

Arg Val Thr Ile Ser Cys 20

<210> 269

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 260

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys 20

<210> 270

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 270

Glu Val Gl
n Leu Val Glu Ser Gly Gly Gly Val Val Gl
n Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser

<210> 271

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 271

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser

```
<210> 272
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                    10
Ser Leu Arg Leu Arg Cys Ala Ala Ser
            20
<210> 273
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 273
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 274
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 274
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
                5
                                    10
                                                        15
1
Thr Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 275
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 275
·Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                     10
Thr Leu Arg Leu Thr Cys Ala Ala Ser
<210> 276
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
Thr Leu Arg Leu Thr Cys Ala Ala Ser
            20
<210> 277
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
Ser Leu Arg Leu Thr Cys Ala Ala Ser
            20
<210> 278
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 278
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                5
                                     10
```

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 279

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 279

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 280

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 280

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

<210> 281

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 281

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

```
<210> 282
```

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 282

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser 20 25

<210> 283

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 283

Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly Glu 1 5 10 15

Thr Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr 65 70 75 80

Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp Thr Ala Thr Tyr Phe Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser 115 120 <210> 284

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 284

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly 1 10 15

Asp Arg Val Ile Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Pro 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 100 105

<210> 285

<211> 123

<212> PRT

<213> Artificial Sequence

/22N\

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 285

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala His Ser Arg His Tyr Tyr Gly Ser Ser Pro Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 286

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 286

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Gly Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 287

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 287

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ala Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 288

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 288

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Cys His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 289

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 289

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 290

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 290

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 $$ 5 $$ 10 $$ 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Tyr Asn Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 291

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 291

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 292

<211> 70

<212> PRT

<213> Mus sp.

<400> 292

Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly Glu
1 10 15

Thr Val Arg Ile Ser Cys Lys Ala Ser Trp Val Lys Gln Ala Pro Gly 20 25 30

Lys Gly Leu Lys Trp Met Gly Arg Phe Thr Phe Ser Leu Glu Thr Ser 35 40 45

Ala Ser Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp Thr 50 60

Ala Thr Tyr Phe Cys Ala 65 70

<210> 293

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 293

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser Gln Trp Tyr Leu Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 294

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 294

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Ser Arg Thr Cys Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 295

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 295

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Ser Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 296

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 296

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Phe Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 297

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 297

Glu Val Gl
n Leu Val Glu Ser Gly Gly Gly Leu Val Gl
n Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr His Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 298

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 298

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Asn Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 299

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 299

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Asn Ser Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 300

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 300

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 301

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 301

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp Tyr 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 302

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 302

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 303

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 303

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 304

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 304

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 305

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 305

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Ser Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 306

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 306

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Arg Asp Phe Asn Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 307

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 307

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Ser Tyr Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 308

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 308

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Arg His Tyr Tyr Gly Ser Ser His Cys Tyr Phe Asp Leu 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 309

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 309

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Ser His Tyr Tyr Gly Ser Ser His Gln Tyr Phe Asp Leu 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 310

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 310

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 311

<211> 17

<212> PRT

<213> Artificial Sequence

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 311
Cys Ala His Ser Arg His Tyr Tyr Gly Ser Ser Pro Gln Tyr Phe Asp
Val
<210> 312
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 312
Cys Ala Lys Tyr Gly Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 313
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 313
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ala Ser His Trp Tyr Phe Asp
                                    10
Val
<210> 314
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 314
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Cys His Trp Tyr Phe Asp
                                    10
```

Val

```
<210> 315
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 315
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Ser His Trp Tyr Phe Asp
                                    10
                5
Val
<210> 316
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 316
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Tyr Asn Gln Tyr Phe Asp
                5
                                    10
Val
<210> 317
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp
```

Val

```
<210> 318
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 318
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser Gln Trp Tyr Leu Asp
Val
<210> 319
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 319
Cys Ala Lys Tyr Pro His Tyr Tyr Ser Arg Thr Cys Gln Tyr Phe Asp
Val
<210> 320
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 320
Cys Ala Lys Tyr Pro His Tyr Tyr Ser Ser His Trp Tyr Phe Asp
                5
                                                         15
1
Val
<210> 321
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 321
Cys Ala Lys Tyr Pro Tyr Phe Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 322
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 322
Cys Ala Lys Tyr Pro Tyr Tyr His Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 323
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 323
Cys Ala Lys Tyr Pro Tyr Tyr Asn Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 324
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 324
Cys Ala Lys Tyr Pro Tyr Tyr Asn Ser Thr Ser His Trp Tyr Phe Asp
                                     10
```

Val

```
<210> 325
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 325
Cys Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp
        5
                                    10
Val
<210> 326
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 326
Cys Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp
               5
                                    10
Tyr
<210> 327
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 327
Cys Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp
                                    10
Val
<210> 328
<211> 17
<212> PRT
<213> Artificial Sequence
```

<220>

```
<223> Description of Artificial Sequence: Synthetic peptide
<400> 328
Cys Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
                                    10
Val
<210> 329
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 329
Cys Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser Ser Trp Tyr Phe Asp
                                    10
Val
<210> 330
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 330
Cys Ala Lys Tyr Pro Tyr Tyr Ser Thr Ser His Trp Tyr Phe Asp
                5
                                    10
                                                        15
Val
<210> 331
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 331
Cys Ala Lys Tyr Arg Asp Phe Asn Gly Ser Ser His Trp Tyr Phe Asp
                                    10
```

Val

```
<210> 332
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Ser Tyr Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 333
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 333
Cys Ala Arg Ala Arg His Tyr Tyr Gly Ser Ser His Cys Tyr Phe Asp
Leu
<210> 334
<211> 17
<212> PRT
<213> Artificial Sequence
```

<223> Description of Artificial Sequence: Synthetic peptide

Cys Ala Arg Asp Ser His Tyr Tyr Gly Ser Ser His Gln Tyr Phe Asp

10

Leu

<400> 334

```
<210> 335
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp
Val
<210> 336
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 336
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 337
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 337
Cys Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp
                5
                                    10
                                                         15
Val
<210> 338
<211> 107
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
```

```
<220>
<221> MOD_RES
<222> (1)..(1)
<223> Asp, Glu or Ala
<220>
<221> MOD RES
<222> (2)..(2)
<223> Ile or Thr
<220>
<221> MOD RES
<222> (3)..(3)
<223> Val, Glu, Lys, Arg, Gln or Thr
<220>
<221> MOD_RES
<222> (4)..(4)
<223> Met or Leu
<220>
<221> MOD_RES
<222> (7)..(7)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (10)..(10)
<223> Ser or Thr
<220>
<221> MOD_RES
<222> (11)..(11)
<223> Leu or Val
<220>
<221> MOD_RES
<222> (13)..(13)
<223> Ala or Val
<220>
<221> MOD RES
<222> (14)..(14)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (15)..(15)
<223> Pro, Val, Leu, Ala or Ile
<220>
<221> MOD RES
<222> (17)..(17)
<223> Glu or Asp
```

```
<220>
<221> MOD RES
<222> (18)..(18)
<223> Arg or Thr
<220>
<221> MOD RES
<222> (19)..(19)
<223> Ala, Val or Ile
<220>
<221> MOD RES
<222> (20)..(20)
<223> Thr or Ala
<220>
<221> MOD_RES
<222> (22)..(22)
<223> Thr, Ser or Ala
<220>
<221> MOD RES
<222> (24)..(24)
<223> Ser, Arg, Asn, Lys, His or Gln
<220>
<221> MOD RES
<222> (25)..(25)
<223> Ala or Ser
<220>
<221> MOD RES
<222> (27)..(27)
<223> Gln or Arg
<220>
<221> MOD RES
<222> (28)..(28)
<223> Ser, Asp, Ala or Pro
<220>
<221> MOD RES
<222> (30)..(30)
<223> Ser, Gly, Arg, Thr or Tyr
<220>
<221> MOD RES
<222> (31)..(31)
<223> Thr, Asn, Ser, Asp or Lys
<220>
<221> MOD_RES
<222> (32)..(32)
<223> Tyr or Asp
```

```
<220>
<221> MOD RES
<222> (33)..(33)
<223> Leu or Ile
<220>
<221> MOD RES
<222> (34)..(34)
<223> Ala, Asn or Thr
<220>
<221> MOD RES
<222> (39)..(39)
<223> Lys or Ile
<220>
<221> MOD RES
<222> (42)..(42)
<223> Gln, Lys, Thr or Ile
<220>
<221> MOD RES
<222> (45)..(45)
<223> Arg, Lys, Gln, Asn, His, Ser or Glu
<220>
<221> MOD RES
<222> (46)..(46)
<223> Val or Leu
<220>
<221> MOD RES
<222> (48)..(48)
<223> Ile or Val
<220>
<221> MOD RES
<222> (50)..(50)
<223> Phe, Ala, Gly, Asp or Ser
<220>
<221> MOD_RES
<222> (51)..(51)
<223> Ala or Thr
<220>
<221> MOD RES
<222> (52)..(52)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (53)..(53)
<223> Asn, Ser, Arg or Thr
```

```
<220>
<221> MOD RES
<222> (55)..(55)
<223> Ala, His or Gln
<220>
<221> MOD RES
<222> (56)..(56)
<223> Ser or Gly
<220>
<221> MOD RES
<222> (59)..(59)
<223> Pro or Thr
<220>
<221> MOD RES
<222> (60)..(60)
<223> Ser, Asn, Asp, Gly or Tyr
<220>
<221> MOD_RES
<222> (65)..(65)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (66)..(66)
<223> Gly or Arg
<220>
<221> MOD RES
\langle 222 \rangle (72)...(72)
<223> Thr or Ala
<220>
<221> MOD RES
\langle 222 \rangle (76) ... (77)
<223> Ser or Arg
<220>
<221> MOD RES
<222> (80)..(80)
<223> Pro or Ala
<220>
<221> MOD RES
<222> (81)..(81)
<223> Glu or Asp
<220>
<221> MOD RES
<222> (83)..(83)
<223> Phe, Val or Ser
```

```
<220>
<221> MOD RES
<222> (85)..(85)
<223> Val, Thr, Ile, Ala or Ser
<220>
<221> MOD RES
<222> (91)..(91)
<223> Tyr or Ser
<220>
<221> MOD RES
<222> (92)..(92)
<223> Ser, Tyr or Asn
<220>
<221> MOD_RES
<222> (93)..(93)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (94)..(94)
<223> Thr, Val, Ala, Pro, Lys, Gly, Ser or Ile
<220>
<221> MOD RES
<222> (96)..(96)
<223> Trp or Tyr
<220>
<221> MOD RES
<222> (100)..(100)
<223> Gln or Gly
<220>
<221> MOD_RES
\langle 222 \rangle (10\overline{4})...(104)
<223> Val or Leu
<220>
<221> MOD RES
<222> (105)..(105)
<223> Glu, Asp or Ala
Xaa Xaa Xaa Xaa Thr Gln Xaa Pro Ser Xaa Xaa Ser Xaa Xaa Gly
Xaa Xaa Xaa Ile Xaa Cys Xaa Xaa Ser Xaa Xaa Ile Xaa Xaa
             20
Xaa Xaa Trp Tyr Gln Gln Xaa Pro Gly Xaa Ala Pro Xaa Xaa Leu Xaa
```

35

```
Tyr Xaa Xaa Xaa Leu Xaa Xaa Gly Val Xaa Xaa Arg Phe Ser Gly
                        55
Xaa Xaa Ser Gly Thr Asp Phe Xaa Leu Thr Ile Xaa Xaa Leu Gln Xaa
Xaa Asp Xaa Ala Xaa Tyr Tyr Cys Gln Gln Xaa Xaa Xaa Pro Xaa
Thr Phe Gly Xaa Gly Thr Lys Xaa Xaa Ile Lys
            100
<210> 339
<211> 110
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<220>
<221> MOD RES
<222> (1)..(1)
<223> Gln, Leu or Asn
<220>
<221> MOD RES
<222> (2)..(2)
<223> Pro, Ala, Phe or Ser
<220>
<221> MOD RES
<222> (3)..(3)
<223> Val or Met
<220>
<221> MOD RES
<222> (10)..(10)
<223> Ala or Thr
<220>
<221> MOD RES
<222> (12)..(12)
<223> Gly or Ala
<220>
<221> MOD RES
<222> (17)..(17)
```

<223> Arg or Ser

```
<220>
<221> MOD RES
<222> (25)..(25)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (26)..(26)
<223> Ser, Thr, Tyr or Asn
<220>
<221> MOD RES
<222> (29)..(29)
<223> Ile or Val
<220>
<221> MOD_RES
<222> (31)..(31)
<223> Ser or Arg
<220>
<221> MOD_RES
<222> (33)..(33)
<223> Ser, Pro, Asn, Ala or Thr
<220>
<221> MOD RES
<222> (35)..(35)
<223> Asn, Thr or Tyr
<220>
<221> MOD RES
<222> (40)..(40)
<223> Leu or Phe
<220>
<221> MOD_RES
<222> (43)..(43)
<223> Thr or Ala
<220>
<221> MOD RES
<222> (47)..(47)
<223> Val, Leu or Phe
<220>
<221> MOD RES
<222> (49)..(49)
<223> Met or Ile
<220>
<221> MOD RES
<222> (51)..(51)
<223> Gly, Thr or Ser
```

```
<220>
<221> MOD_RES
<222> (53)..(53)
<223> Asn or Asp
<220>
<221> MOD RES
\langle 222 \rangle (54)...(54)
<223> Gln or Glu
<220>
<221> MOD_RES
<222> (61)..(61)
<223> Asp or Glu
<220>
<221> MOD_RES
<222> (63)..(63)
<223> Phe or Leu
<220>
<221> MOD RES
<222> (67)..(67)
<223> Lys or Arg
<220>
<221> MOD RES
<222> (69)..(69)
<223> Gly or Ala
<220>
<221> MOD RES
<222> (80)..(80)
<223> Gln, Leu or Arg
<220>
<221> MOD_RES
<222> (90)..(90)
<223> Ala or Gly
<220>
<221> MOD RES
<222> (91)..(91)
<223> Ala, Ser or Thr
<220>
<221> MOD_RES
<222> (97)..(97)
<223> Asn, Ser or Thr
<220>
<221> MOD RES
<222> (103)..(103)
<223> Thr or Ala
```

```
<220>
<221> MOD RES
<222> (106)..(106)
<223> Lys or Gln
<400> 339
Xaa Xaa Leu Thr Gln Pro Pro Ser Xaa Ser Xaa Thr Pro Gly Gln
Xaa Val Thr Ile Ser Cys Ser Gly Xaa Xaa Ser Asn Xaa Gly Xaa Asn
Xaa Val Xaa Trp Tyr Gln Gln Xaa Pro Gly Xaa Ala Pro Lys Xaa Leu
Xaa Tyr Xaa Asn Xaa Xaa Arg Pro Ser Gly Val Pro Xaa Arg Xaa Ser
Gly Ser Xaa Ser Xaa Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Xaa
                    70
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Xaa Xaa Trp Asp Asp Ser Leu
                85
                                    90
Xaa Gly Tyr Val Phe Gly Xaa Gly Thr Xaa Leu Thr Val Leu
                                105
<210> 340
<211> 121
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<220>
<221> MOD RES
<222> (1)..(1)
<223> Glu or Gln
<220>
<221> MOD RES
<222> (2)..(2)
<223> Val or Gly
<220>
<221> MOD RES
```

<222> (6)..(6) <223> Gln or Glu

```
<220>
<221> MOD RES
<222> (11)..(11)
<223> Val or Leu
<220>
<221> MOD RES
<222> (17)..(17)
<223> Ser or Thr
<220>
<221> MOD_RES
<222> (21)..(21)
<223> Ser, Thr or Arg
<220>
<221> MOD RES
<222> (24)..(24)
<223> Ala or Val
<220>
<221> MOD_RES
<222> (27)..(27)
<223> Tyr or Phe
<220>
<221> MOD_RES
<222> (28)..(28)
<223> Thr, Asp, Asn, Ser or Ala
<220>
<221> MOD RES
<222> (29)..(29)
<223> Phe or Leu
<220>
<221> MOD_RES
<222> (30)..(30)
<223> Thr, Asp, Tyr, Ala, Ser or Asn
<220>
<221> MOD_RES
<222> (31)..(31)
<223> Asn, His or Ser
<220>
<221> MOD RES
<222> (32)..(32)
<223> Tyr or Phe
<220>
<221> MOD RES
<222> (34)..(34)
<223> Met, Leu, Ile or Val
```

```
<220>
<221> MOD RES
<222> (37)..(37).
<223> Ile, Val or Leu
<220>
<221> MOD RES
<222> (45)..(45)
<223> Leu or Pro
<220>
<221> MOD_RES
<222> (51)..(51)
<223> Ile or Val
<220>
<221> MOD RES
<222> (54)..(54)
<223> Tyr or Asn
<220>
<221> MOD RES
<222> (55)..(55)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (57)..(57)
<223> Glu or Ala
<220>
<221> MOD RES
<222> (58)..(58)
<223> Pro, Thr or Ser
<220>
<221> MOD RES
<222> (61)..(61)
<223> Ala or Val
<220>
<221> MOD RES
<222> (62)..(62)
<223> Ala, His, Gln, Pro, Asp or Glu
<220>
<221> MOD RES
<222> (63)..(63)
<223> Asp or Glu
<220>
<221> MOD RES
<222> (65)..(65)
<223> Lys or Thr
```

```
<220>
<221> MOD RES
<222> (68)..(68)
<223> Val, Phe or Leu
<220>
<221> MOD RES
<222> (70)..(70)
<223> Phe or Ile
<220>
<221> MOD RES
<222> (72)..(72)
<223> Leu or Arg
<220>
<221> MOD RES
<222> (73)..(73)
<223> Asp or Asn
<220>
<221> MOD_RES
<222> (74)..(74)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (77)..(77)
<223> Ser or Asn
<220>
<221> MOD RES
<222> (78)..(78)
<223> Thr, Gln, Pro or Lys
<220>
<221> MOD RES
<222> (79)..(79)
<223> Ala, Val or Pro
<220>
<221> MOD_RES
<222> (83)..(83)
<223> Leu or Met
<220>
<221> MOD RES
<222> (98)..(98)
<223> Lys or Arg
<220>
<221> MOD RES
<222> (101)..(101)
<223> His or Tyr
```

```
<220>
<221> MOD RES
<222> (105)..(105)
<223> Ser, Arg or Thr
<220>
<221> MOD RES
\langle 222 \rangle (11\overline{4})...(114)
<223> Gly or Ala
<400> 340
Xaa Xaa Gln Leu Val Xaa Ser Gly Gly Kaa Val Gln Pro Gly Gly
                5
                                     10
Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser Gly Xaa Xaa Xaa Xaa Xaa
                                 25
Gly Xaa Asn Trp Xaa Arg Gln Ala Pro Gly Lys Gly Xaa Glu Trp Val
                             40
Gly Trp Xaa Asn Thr Xaa Xaa Gly Xaa Xaa Thr Tyr Xaa Xaa Phe
    50
                         55
Xaa Arg Arg Xaa Thr Xaa Ser Xaa Xaa Ser Lys Xaa Xaa Xaa Tyr
                    70
                                         75
65
Leu Gln Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
                                                          95
Ala Xaa Tyr Pro Xaa Tyr Tyr Gly Xaa Ser His Trp Tyr Phe Asp Val
            100
Trp Xaa Gln Gly Thr Leu Val Thr Val
        115
                             120
<210> 341
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ile or Val

```
<220>
<221> MOD RES
<222> (5)..(5)
<223> Tyr or Asn
<220>
<221> MOD RES
<222> (6)..(6)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (9)..(9)
<223> Pro, Thr or Ser
<220>
<221> MOD_RES
<222> (12)..(12)
<223> Ala or Val
<220>
<221> MOD_RES
<222> (13)..(13)
<223> Ala, Gln, Pro, His, Asp or Glu
<220>
<221> MOD RES
<222> (14)..(14)
<223> Asp or Glu
<220>
<221> MOD RES
<222> (16)..(16)
<223> Lys or Thr
<400> 341
Trp Xaa Asn Thr Xaa Xaa Gly Glu Xaa Thr Tyr Xaa Xaa Xaa Phe Xaa
Arg
<210> 342
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<220>
<221> MOD RES
<222> (4)..(4)
<223> Tyr or His
```

```
<400> 342
Lys Tyr Pro Xaa Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
                                     10
<210> 343
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<220>
<221> MOD RES
<222> (1)..(1)
<223> Glu or Gln
<220>
<221> MOD RES
<222> (6)..(6)
<223> Gln or Glu
<220>
<221> MOD RES
<222> (11)..(11)
<223> Val or Leu
<220>
<221> MOD_RES
<222> (17)..(17)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (21)..(21)
<223> Ser, Thr or Arg
<220>
<221> MOD RES
<222> (24)..(24)
<223> Ala or Val
<400> 343
Xaa Val Gln Leu Val Xaa Ser Gly Gly Gly Xaa Val Gln Pro Gly Gly
                                                         15
                5
                                     10
1
Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser
            20
<210> 344
<211> 14
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<220>
<221> MOD RES
<222> (2)..(2)
<223> Ile or Val
<400> 344
Trp Xaa Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly
<210> 345
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<220>
<221> MOD_RES
<222> (2)..(2)
<223> Phe or Val
<220>
<221> MOD RES
<222> (4)..(4)
<223> Phe or Ile
<220>
<221> MOD RES
<222> (6)..(6)
<223> Leu or Arg
<220>
<221> MOD_RES
<222> (8)..(8)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (11)..(11)
<223> Ser or Asn
<220>
<221> MOD RES
<222> (12)..(12)
<223> Thr, Gln or Lys
<220>
<221> MOD RES
<222> (13)..(13)
<223> Ala or Val
```

```
<220>
<221> MOD RES
<222> (17)..(17)
<223> Met or Leu
<400> 345
Arg Xaa Thr Xaa Ser Xaa Asp Xaa Ser Lys Xaa Xaa Xaa Tyr Leu Gln
                 5
                                     10
Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                                    30
<210> 346
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<220>
<221> MOD RES
<222> (2)..(2)
<223> Gly or Ala
<400> 346
Trp Xaa Gln Gly Thr Leu Val Thr Val Ser Ser
                 5
<210> 347
<211> 121
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<220>
<221> MOD RES
<222> (1)..(1)
<223> Glu or Gln
<220>
<221> MOD RES
<222> (2)..(2)
<223> Val or Gly
<220>
<221> MOD RES
<222> (6)..(6)
<223> Gln or Glu
```

```
<220>
<221> MOD RES
<222> (11)..(11)
<223> Val or Leu
<220>
<221> MOD RES
<222> (17)..(17)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (21)..(21)
<223> Ser, Thr or Arg
<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala or Val
<220>
<221> MOD RES
<222> (27)..(27)
<223> Tyr or Phe
<220>
<221> MOD RES
<222> (28)..(28)
<223> Thr, Asp, Asn, Ser or Ala
<220>
<221> MOD RES
<222> (29)..(29)
<223> Phe or Leu
<220>
<221> MOD_RES
<222> (30)..(30)
<223> Thr, Asp, Tyr, Ala, Ser or Asn
<220>
<221> MOD RES
<222> (31)..(31)
<223> Asn, His or Ser
<220>
<221> MOD_RES
<222> (32)..(32)
<223> Tyr or Phe
<220>
<221> MOD RES
<222> (34)..(34)
<223> Met, Leu, Ile or Val
```

```
<220>
<221> MOD RES
<222> (37)..(37)
<223> Ile, Val or Leu
<220>
<221> MOD RES
<222> (45)..(45)
<223> Leu or Pro
<220>
<221> MOD RES
<222> (51)..(51)
<223> Ile or Val
<220>
<221> MOD_RES
<222> (54)..(54)
<223> Tyr or Asn
<220>
<221> MOD RES
<222> (55)..(55)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (57)..(57)
<223> Glu or Ala
<220>
<221> MOD RES
<222> (58)..(58)
<223> Pro, Thr or Ser
<220>
<221> MOD_RES
<222> (61)..(61)
<223> Ala or Val
<220>
<221> MOD RES
<222> (62)..(62)
<223> Ala, His, Gln, Pro, Asp or Glu
<220>
<221> MOD_RES
<222> (63)..(63)
<223> Asp or Glu
<220>
<221> MOD RES
<222> (65)..(65)
<223> Lys or Thr
```

```
<220>
<221> MOD RES
<222> (68)..(68)
<223> Val, Phe or Leu
<220>
<221> MOD RES
<222> (70)..(70)
<223> Phe or Ile
<220>
<221> MOD_RES
<222> (72)..(72)
<223> Leu or Arg
<220>
<221> MOD RES
<222> (73)..(73)
<223> Asp or Asn
<220>
<221> MOD RES
<222> (74)..(74)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (77)..(77)
<223> Ser or Asn
<220>
<221> MOD_RES
<222> (78)..(78)
<223> Thr, Gln, Pro or Lys
<220>
<221> MOD RES
<222> (79)..(79)
<223> Ala, Val or Pro
<220>
<221> MOD RES
<222> (83)..(83)
<223> Leu or Met
<220>
<221> MOD RES
<222> (98)..(98)
<223> Lys, Arg or His
<220>
<221> MOD RES
<222> (99)..(99)
<223> Tyr, Ala, Asp or Ser
```

```
<220>
<221> MOD RES
<222> (100)..(100)
<223> Pro, Arg, Ser or Gly
<220>
<221> MOD RES
<222> (101)..(101)
<223> Tyr, His or Asp
<220>
<221> MOD RES
<222> (102)..(102)
<223> Tyr or Phe
<220>
<221> MOD_RES
<222> (103)..(103)
<223> Tyr, Asn, Ser or His
<220>
<221> MOD RES
<222> (104)..(104)
<223> Gly or Ser
<220>
<221> MOD RES
<222> (105)..(105)
<223> Ser, Thr, Arg, Gly or Ala
<220>
<221> MOD RES
<222> (106)..(106)
<223> Ser, Tyr, Cys or Thr
<220>
<221> MOD_RES
<222> (107)..(107)
<223> His, Pro, Cys, Asn, Gln or Ser
<220>
<221> MOD RES
<222> (108)..(108)
<223> Trp, Gln or Cys
<220>
<221> MOD_RES
<222> (110)..(110)
<223> Phe or Leu
<220>
<221> MOD RES
\langle 222 \rangle (11\overline{2})...(112)
<223> Val, Leu or Tyr
```

<220>

<221> MOD RES

<222> (114)..(114)

<223> Gly or Ala

<400> 347

Xaa Xaa Gln Leu Val Xaa Ser Gly Gly Gly Xaa Val Gln Pro Gly Gly 1 5 10 15

Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser Gly Xaa Xaa Xaa Xaa Xaa Xaa 20 25 30

Gly Xaa Asn Trp Xaa Arg Gln Ala Pro Gly Lys Gly Xaa Glu Trp Val 35 40 45

Gly Trp Xaa Asn Thr Xaa Xaa Gly Xaa Xaa Thr Tyr Xaa Xaa Xaa Phe 50 60

Xaa Arg Arg Xaa Thr Xaa Ser Xaa Xaa Ser Lys Xaa Xaa Xaa Tyr 65 70 75 80

Leu Gln Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Trp Xaa Gln Gly Thr Leu Val Thr Val 115 120

<210> 348

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 348

Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp 1 10 15

Val Trp Gly

```
<210> 349
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<220>
<221> MOD RES
<222> (3)..(3)
<223> Gln, Val, Glu or Leu
<220>
<221> MOD RES
<222> (4)..(4)
<223> Met or Leu
<220>
<221> MOD_RES
<222> (7)..(7)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (8)..(8)
<223> Pro, His or Thr
<220>
<221> MOD RES
<222> (9)..(9)
<223> Ser or Lys
<220>
<221> MOD RES
<222> (10)..(10)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (11)..(11)
<223> Leu or Met
<220>
<221> MOD_RES
<222> (13)..(13)
<223> Ala, Thr or Val
<220>
<221> MOD RES
<222> (14)..(14)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (15)..(15)
<223> Val, Ala, Leu or Pro
```

```
<220>
<221> MOD_RES
<222> (17)..(17)
<223> Asp or Glu
<220>
<221> MOD RES
<222> (19)..(19)
<223> Val or Ala
<220>
<221> MOD RES
<222> (20)..(20)
<223> Thr, Ser or Ile
<220>
<221> MOD_RES
<222> (22)..(22)
<223> Thr or Ser
<220>
<221> MOD RES
<222> (24)..(24)
<223> Ser, Arg, His, Lys, Asn or Gln
<220>
<221> MOD RES
<222> (29)..(29)
<223> Ile or Val
<220>
<221> MOD RES
<222> (30)..(30)
<223> Ser or Gly
<220>
<221> MOD_RES
<222> (31)..(31)
<223> Asn, Ser or Thr
<220>
<221> MOD RES
<222> (32)..(32)
<223> Tyr or Ala
<220>
<221> MOD RES
<222> (33)..(33)
<223> Leu or Val
<220>
<221> MOD RES
<222> (34)..(34)
<223> Asn or Ala
```

```
<220>
<221> MOD RES
<222> (41)..(41)
<223> Gly or Asp
<220>
<221> MOD RES
<222> (42)..(42)
<223> Lys, His or Gln
<220>
<221> MOD_RES
<222> (43)..(43)
<223> Ala, Ser or Thr
<220>
<221> MOD RES
<222> (44)..(44)
<223> Pro or Val
<220>
<221> MOD RES
<222> (45)..(45)
<223> Lys, Arg, His, Asn, Gln or Ser
<220>
<221> MOD RES
<222> (46)..(46)
<223> Val or Leu
<220>
<221> MOD RES
<222> (50)..(50)
<223> Phe, Ala, Cys, Asp, Gly, Ser or Tyr
<220>
<221> MOD RES
<222> (51)..(51)
<223> Thr or Ala
<220>
<221> MOD_RES
<222> (53)..(53)
<223> Ser or Phe
<220>
<221> MOD RES
<222> (54)..(54)
<223> Leu or Arg
<220>
<221> MOD RES
<222> (55)..(55)
<223> His or Tyr
```

```
<220>
<221> MOD RES
<222> (56)..(56)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (60)..(60)
<223> Ser, Asp, Ala, Gly, Tyr or Asn
<220>
<221> MOD RES
<222> (63)..(63)
<223> Ser or Thr
<220>
<221> MOD RES
<222> (65)..(65)
<223> Ser or Asn
<220>
<221> MOD_RES
<222> (66)..(66)
<223> Gly or Arg
<220>
<221> MOD RES
<222> (71)..(71)
<223> Phe or Tyr
<220>
<221> MOD RES
<222> (72)..(72)
<223> Thr or Ser
<220>
<221> MOD RES
<222> (73)..(73)
<223> Leu or Phe
<220>
<221> MOD RES
<222> (77)..(77)
<223> Ser or Arg
<220>
<221> MOD RES
<222> (78)..(78)
<223> Leu or Val
<220>
<221> MOD RES
<222> (79)..(79)
<223> Gln or Glu
```

١

```
<220>
<221> MOD RES
<222> (80)..(80)
<223> Pro or Ala
<220>
<221> MOD RES
<222> (83)..(83)
<223> Phe, Leu or Val
<220>
<221> MOD RES
<222> (85)..(85)
<223> Thr, Val, Ala or Ile
<220>
<221> MOD RES
<222> (91)..(91)
<223> Tyr or His
<220>
<221> MOD RES
<222> (92)..(92)
<223> Ser, Cys, Asn or Tyr
<220>
<221> MOD RES
<222> (94)..(94)
<223> Val, Ser, Ala, Gly, Thr, Cys, Asp, Glu, Lys, Asn, Gln, Arg,
     Trp or Tyr
<220>
<221> MOD RES
<222> (96)..(96)
<223> Trp, Cys, Phe, Leu, Gln or Tyr
<400> 349
Asp Ile Xaa Xaa Thr Gln Xaa Xaa Xaa Xaa Ser Xaa Xaa Saa Gly
                5
                                    10
                                                        15
Xaa Arg Xaa Xaa Ile Xaa Cys Xaa Ala Ser Gln Asp Xaa Xaa Xaa
                                25
            20
Xaa Xaa Trp Tyr Gln Gln Lys Pro Xaa Xaa Xaa Xaa Xaa Leu Ile
        35
                            40
Tyr Xaa Xaa Ser Xaa Xaa Xaa Gly Val Pro Xaa Arg Phe Xaa Gly
    50
Xaa Xaa Ser Gly Thr Asp Xaa Xaa Xaa Thr Ile Ser Xaa Xaa Xaa
                    70
```

```
Glu Asp Xaa Ala Xaa Tyr Tyr Cys Gln Gln Xaa Xaa Thr Xaa Pro Xaa 85 90 95
```

Thr

<221> MOD_RES <222> (27)..(27) <223> Tyr or Phe

<221> MOD_RES <222> (28)..(28)

<223> Thr, Ala, Asp, Asn, Ser or Tyr

<220>

<210> 350 <211> 114 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic polypeptide <220> <221> MOD_RES <222> (1)..(1) <223> Glu or Gln <220> <221> MOD RES <222> (6)..(6) <223> Glu or Gln <220> <221> MOD RES <222> (11)..(11) <223> Leu or Val <220> <221> MOD RES <222> (17)..(17) <223> Ser or Thr <220> <221> MOD_RES <222> (21)..(21) <223> Ser or Thr <220> <221> MOD_RES <222> (24)..(24) <223> Ala or Val <220>

```
<220>
<221> MOD RES
<222> (29)..(29)
<223> Phe or Leu
<220>
<221> MOD RES
<222> (30)..(30)
<223> Thr, Ala, Asp, Asn, Ser or Tyr
<220>
<221> MOD RES
<222> (31)..(31)
<223> Asn, His, Arg or Ser
<220>
<221> MOD_RES
<222> (32)..(32)
<223> Tyr or Phe
<220>
<221> MOD_RES
<222> (33)..(33)
<223> Gly, Ala, Ser or Thr
<220>
<221> MOD RES
<222> (34)..(34)
<223> Met, Leu, Val or Ile
<220>
<221> MOD RES
<222> (37)..(37)
<223> Val, Ile, Ala, Leu, Pro or Thr
<220>
<221> MOD_RES
<222> (45)..(45)
<223> Leu or Pro
<220>
<221> MOD RES
<222> (51)..(51)
<223> Ile or Val
<220>
<221> MOD RES
<222> (54)..(54)
<223> Tyr or Asn
<220>
<221> MOD RES
<222> (55)..(55)
<223> Thr or Asn
```

```
<220>
<221> MOD RES
<222> (58)..(58)
<223> Pro, Ser or Thr
<220>
<221> MOD RES
<222> (61)..(61)
<223> Ala or Val
<220>
<221> MOD_RES
<222> (62)..(62)
<223> Ala, Pro, Asp, Glu, His or Gln
<220>
<221> MOD RES
<222> (63)..(63)
<223> Asp or Glu
<220>
<221> MOD RES
<222> (65)..(65)
<223> Lys or Thr
<220>
<221> MOD RES
<222> (68)..(68)
<223> Phe, Val or Leu
<220>
<221> MOD RES
<222> (70)..(70)
<223> Phe or Ile
<220>
<221> MOD RES
<222> (72)..(72)
<223> Leu or Arg
<220>
<221> MOD RES
<222> (74)..(74)
<223> Thr or Asn
<220>
<221> MOD RES
<222> (77)..(77)
<223> Ser or Asn
<220>
<221> MOD RES
<222> (78)..(78)
<223> Thr, Lys, Pro or Gln
```

```
<220>
<221> MOD RES
<222> (79)..(79)
<223> Ala, Leu, Pro or Val
<220>
<221> MOD RES
<222> (83)..(83)
<223> Met or Leu
<220>
<221> MOD RES
<222> (98)..(98)
<223> Lys, Arg, His, Asn, Gln or Ser
<220>
<221> MOD RES
<222> (99)..(99)
<223> Tyr, Ser, Ala, Gly, Thr, Cys, Asp, Arg, Glu, Asn, Gln, Lys, Trp,
      Pro or His
<220>
<221> MOD RES
<222> (100)..(100)
<223> Pro, Ser, Arg, Ala, Gly, Thr, Cys, Asp, His, Asn, Gln, Tyr, Glu,
      Lys or Trp
<220>
<221> MOD RES
<222> (101)..(101)
<223> His, Tyr, Cys, Asp, Gly or Arg
<220>
<221> MOD RES
\langle 222 \rangle (10\overline{2})...(102)
<223> Tyr, Val, Asp, Glu, Phe or Leu
<220>
<221> MOD RES
<222> (103)..(103)
<223> Tyr, Cys, Asp, Gly, Asn or Ser
<220>
<221> MOD RES
<222> (104)..(104)
<223> Gly or Ser
<220>
<221> MOD RES
<222> (105)..(105)
<223> Ser, Thr, Ala, Gly, Pro or Arg
<220>
<221> MOD RES
<222> (106)..(106)
<223> Ser, Asn, Thr, Ala, Gly, Cys, Asp, Tyr, Glu, Lys, Gln, Arg,
      or Trp
```

```
<220>
<221> MOD RES
<222> (107)..(107)
<223> His, Cys, Asn, Arg, Ser or Tyr
<220>
<221> MOD RES
<222> (108)..(108)
<223> Trp, Cys, Gln or Tyr
<220>
<221> MOD RES
<222> (112)..(112)
<223> Val, Tyr or Leu
<400> 350
Xaa Val Gln Leu Val Xaa Ser Gly Gly Gly Xaa Val Gln Pro Gly Gly
Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser Gly Xaa Xaa Xaa Xaa Xaa
Xaa Xaa Asn Trp Xaa Arg Gln Ala Pro Gly Lys Gly Xaa Glu Trp Val
                            40
Gly Trp Xaa Asn Thr Xaa Xaa Gly Glu Xaa Thr Tyr Xaa Xaa Xaa Phe
Xaa Arg Arg Xaa Thr Xaa Ser Xaa Asp Xaa Ser Lys Xaa Xaa Xaa Tyr
65
Leu Gln Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Phe Asp Xaa
            100
                                105
                                                    110
Trp Gly
<210> 351
<211> 15
<212> PRT
```

<223> Description of Artificial Sequence: Synthetic peptide

<213> Artificial Sequence

```
<400> 351
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile Tyr
                                     10
<210> 352
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 352
Gly Val Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
<210> 353
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 353
Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                5
<210> 354
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile Tyr
                                     10
<210> 355
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
```

```
<400> 355
Gly Val Pro Asn Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
                                     10
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
                                 25
<210> 356
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 356
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile Tyr
<210> 357
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 357
Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
                 5
                                     10
                                                         15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20
<210> 358
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 358
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
                                                         15
<210> 359
<211> 32
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 359
Gly Val Pro Ser Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
<210> 360
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 360
Gly Val Pro Asn Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                5
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20
                                 25
<210> 361
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 361
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile Tyr
                                    10
<210> 362
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 362
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
                5
```

```
<210> 363
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 363
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile Tyr
                                     10
<210> 364
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 364
Gly Val Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Phe Ala Val Tyr Tyr Cys
            20
                                 25
<210> 365
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 365
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1
                5
                                     10
                                                         15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
                                 25
                                                     30
            20
<210> 366
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 366
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Leu Leu Ile Tyr
                                     10
```

```
<210> 367
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 367
Gly Val Pro Gly Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
                                 25
<210> 368
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile Tyr
                                     10
<210> 369
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 369
Gly Val Pro Asn Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
                                                        15
                 5
                                     10
Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Val Tyr Tyr Cys
                                 25
                                                    30
<210> 370
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 370
Phe Gly Gly Gly Thr Lys Val Ala Ile Lys
<210> 371
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 371
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
<210> 372
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 372
Gly Val Thr Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                5
                                     10
                                                         15
Leu Thr Ile Arg Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
                                                     30
<210> 373
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 374
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

```
<400> 374
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile Tyr
<210> 375
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 375
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
<210> 376
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 376
Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
                5
<210> 377
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
                                     10
                                                         15
<210> 378
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
```

<400> 378

<212> PRT

<213> Artificial Sequence

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr 10 Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Ala Tyr Tyr Cys 25 <210> 379 <211> 15 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic peptide <400> 379 Trp Tyr Gln Gln Lys Pro Gly Ile Ala Pro Lys Val Leu Ile Tyr 10 <210> 380 <211> 10 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic peptide <400> 380 Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys 5 <210> 381 <211> 32 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic polypeptide <400> 381 Gly Val Pro Ser Arg Phe Ser Gly Thr Gly Ser Gly Thr Asp Phe Ala 10 Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Ser Ala Ser Tyr Tyr Cys 25 20 30 <210> 382 <211> 15

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 382
Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
                                     10
<210> 383
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr
<210> 384
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 384
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile Tyr
<210> 385
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 385
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile Tyr
                5
1
                                     10
                                                         15
<210> 386
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 386
Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Phe Leu Met Tyr
                                     10
```

```
<210> 387
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
                                     10
Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
                                 25
<210> 388
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 388
Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
<210> 389
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 389
Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
                 5
                                     10
                                                         15
<210> 390
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 390
Gly Val Pro Asp Arg Leu Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
                                     10
                5
```

```
Leu Ala Ile Ser Gly Leu Leu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
                                 25
                                                    30
<210> 391
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
Gly Val Pro Asp Arg Phe Ser Asp Ser Lys Ser Gly Thr Ser Ala Ser
                5
Leu Gly Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Phe Cys
<210> 392
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 392
Phe Gly Thr Gly Thr Lys Val Thr Val Leu
                 5
<210> 393
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 393
Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Val Leu Ile Tyr
                                     10
                                                        15
<210> 394
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
```

```
<210> 395
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 395
Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Val Leu Met Tyr
                                     10
<210> 396
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 396
Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
                                25
<210> 397
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 397
Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu Ile Tyr
                                                         15
                5
                                     10
1
<210> 398
<211> 32
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 398
Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Ala Thr Ser Ala Ser
                5
                                    10
```

```
Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
            20
                                 25
<210> 399
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 399
Phe Gly Ala Gly Thr Gln Leu Thr Val Leu
                5
<210> 400
<211> 15
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 400
Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu Met Tyr
                                     10
<210> 401
<211> 32
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 401
Gly Val Pro Glu Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
1
                5
                                     10
Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
                                 25
                                                     30
            20
<210> 402
<211> 14
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 402
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly
                5
                                     10
```

```
<210> 403
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 403
Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu Gln
                                     10
                 5
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 25
<210> 404
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 404
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 405
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 405
Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr Leu Gln
                                                         15
1
                 5
                                     10
Leu Asn Ser Leu Arq Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 25
                                                     30
<210> 406
<211> 14
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
```

<400> 406 Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly <210> 407 <211> 31 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic polypeptide <400> 407 Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr Leu Gln 10 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala <210> 408 <211> 31 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic polypeptide <400> 408 Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Ala Tyr Leu Gln 5 10 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala 30 <210> 409 <211> 31 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic polypeptide Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu Gln 10

Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala

25

20

```
<210> 410
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 410
Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr Leu Gln
                                    10
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                25
            20
<210> 411
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 411
Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu Gln
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 25
<210> 412
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 412
Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Gln Ala Tyr Leu Gln
                5
                                    10
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 25
                                                     30
<210> 413
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Description of Artificial Sequence: Synthetic peptide

```
<400> 413
Trp Ala Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 414
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 414
Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr Leu Gln
                                     10
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
<210> 415
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 415
Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Val Tyr Leu Gln
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
            20
                                 25
<210> 416
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 416
Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Lys Ala Tyr Leu Gln
                                     10
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
```

25

30

```
<210> 417
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 417
Arg Val Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr Leu Gln
                                     10
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                25
            20
<210> 418
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 418
Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr Leu Gln
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                25
<210> 419
<211> 31
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic polypeptide
<400> 419
Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr Leu Gln
                5
                                     10
                                                         15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 25
                                                     30
<210> 420
<211> 31
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 420 Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu Gln 1 5 10 15	
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala 20 25 30	
<210> 421 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 421 attaatggat ccgmcatccr gwtgacccag tctcc	35
<210> 422 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 422 attaatggat ccgatrttgt gatgacycag wctcc	35
<210> 423 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 423 attaatggat ccgaaatwgt gwtgacrcag tctcc	35
<210> 424 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 424 attaatggat ccgacatcgt gatgacccag tctcc	35

```
<210> 425
<211> 35
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 425
                                                                    35
attaatggat ccgaaacgac actcacgcag tctcc
<210> 426
<211> 35
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 426
                                                                     35
attaatggat ccgaaattgt gctgactcag tctcc
<210> 427
<211> 32
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic primer
<400> 427
attaatggat cccagtctgt gytgackcag cc
                                                                     32
<210> 428
<211> 32
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 428
attaatggat cccagtctgc cctgactcag cc
                                                                     32
<210> 429
<211> 34
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 429
attaatggat cctcctatga gctgacwcag cyac
                                                                     34
```

```
<210> 430
<211> 33
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 430
                                                                        33
attaatggat cctcttctga gctgactcag gac
<210> 431
<211> 32
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic primer
<400> 431
attaatggat ccctgcctgt gctgactcag cc
                                                                        32
<210> 432
<211> 32
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 432
                                                                        32
attaatggat cccagcytgt gctgactcaa tc
<210> 433
<211> 32
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 433
attaatggat cccagsctgt gctgactcag cc
                                                                        32
<210> 434
<211> 33
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
```

<400> 434 attaatggat ccaattttat gctgactcag ccc	33
<210> 435 <211> 33 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 435 attaatggat cccagrctgt ggtgacycag gag	33
<210> 436 <211> 32 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 436 attaatggat cccaggcagg gctgactcag cc	32
<210> 437 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 437 ttaattgcgg ccgctttgat ytccascttg gtccc	35
<210> 438 <211> 35 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic primer	
<400> 438 ttaattgcgg ccgctttgat atccactttg gtccc	35
<210> 439 <211> 35 <212> DNA <213> Artificial Sequence	

```
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 439
                                                                   35
ttaattgcgg ccgctttaat ctccagtcgt gtccc
<210> 440
<211> 31
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic primer
<400> 440
                                                                   31
ttaattgcgg ccgctaggac ggtsascttg g
<210> 441
<211> 31
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic primer
<400> 441
                                                                   31
ttaattgcgg ccgcgaggac ggtcagctgg g
<210> 442
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 442
Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
                                   10
<210> 443
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic 6xHis tag
<400> 443
His His His His His
```